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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Reallocation of Television Channels 60-69, the 746-806 MHz Band	)	ET Docket No. 97-157

To: The Commission

COMMENTS OF CORDILLERA COMMUNICATIONS, INC.

Cordillera Communications, Inc. ("Cordillera"), by its attorneys, submits herewith its comments in the above-referenced proceeding proposing the reallocation of Television Channels 60-69, the 746-806 MHz band.[1/]

I. Introduction.

Through wholly-owned subsidiaries, Cordillera owns nine VHF television stations licensed to communities in Arizona, Idaho, Colorado, Louisiana and Montana. Cordillera also owns and operates a large number of television translators and low power television ("LPTV") stations in Arizona, Colorado, Idaho and Montana. These translators and LPTV stations retransmit the signals of Cordillera's full power television stations to viewers located in areas with rugged terrain who would be unable to receive an over-the-air television signal absent a translator or LPTV station.

Many of the translators and LPTV stations owned by Cordillera operate on channels within the 746-806 MHz band which in its *Notice* the Commission has proposed to reallocate

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1/ *See Reallocation of Television Channels 60-69, the 746-806 MHz Band*, Notice of Proposed Rule Making, ET Docket No. 97-157, FCC 97-245 (released July 10, 1997) (the "*Notice*").

for public safety, broadcast and private land mobile use.[2/] The Commission has proposed that existing LPTV and TV translator stations could continue to operate in the band; however, they would be required to go off the air or relocate to another channel if they cause interference to these new services.[3/] Although Cordillera supports the Commission's spectrum allocation goals, the Commission's proposals would result in the loss of primary off-air television service provided by LPTV and translator stations to viewers residing in the western mountainous states. Accordingly, any allocation scheme adopted by the Commission in this proceeding must be designed to ensure that new services in this band protect existing translator and LPTV stations from harmful interference.

II. Translator and LPTV Stations Operating on Channels 60-69 Must Be Protected To Ensure Continued Over-the-Air Television Service.

The Commission has recognized time and again that notwithstanding translators' and LPTV stations' "official" secondary status, in the western mountainous regions of the country, such stations are critical in providing primary over-the-air television service.[4/] Cordillera's stations in Idaho, Colorado, Montana and Arizona are no exception. Cordillera relies on translators to a significant extent to provide primary fill-in service as well as

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[2/] *Id.* ¶ 1.

[3/] *Id.* ¶¶ 17-20.

[4/] *See, e.g., Quality Telecasting Corp.*, 31 FCC 2d 639, 640 (1971) (finding that translators were necessary to provide fill-in service to city of license due to rough and unique terrain); *Nevada Radio-Television, Inc.*, 38 FCC 2d 555, 559 (1972) ("It cannot be gainsaid that Nevada, with its vast unsettled areas, its rugged terrain and, . . . its lack of major centers of populations, constitutes a unique situation" warranting use of a translator network), *recon. dismissed*, FCC No. 73-351 (1973); *Low Power Television & Television Translator Service,* 102 FCC 2d 295, 302 (1980) (recognizing contribution of TV translators "in providing television service to areas where direct reception of full-service television stations is hindered by distance or intervening barriers").

primary service to areas outside of its main stations' authorized coverage areas that receive few if any over-the-air television signals from full power stations.

In the instant *Notice,* the Commission has proposed that translators and LPTV stations currently operating on Channels 60-69 be permitted to continue operations provided that they do not cause interference to the new primary services which will share the spectrum. This proposal not only flies in the face of the Commission's stated intention to reevaluate the secondary status of the LPTV and TV translator service[5/] but also essentially ignores the large number of television viewers in the western states who receive primary, over-the-air television service from translator and LPTV stations such as those owned by Cordillera. To ensure that translators and LPTV stations operating on Channels 60-69 may continue this service to the public, such stations must receive interference protection from new services operating in the band.

KVOA, Cordillera's Tucson, Arizona television station, uses Television Translator K64BV to provide primary, fill-in city grade coverage. As shown in the Engineering Statement of Donald Everist of Cohen, Dippell & Everist, P.C. (the "Engineering Statement") included in Exhibit A hereto, on a predicted basis, KVOA provides service to virtually all areas in and around Tucson. However, the uniquely rugged terrain of the Casas Adobes and Catalina Foothills areas immediately outside of Tucson to the northeast and within KVOA's predicted 74 dBu contour, prevents KVOA from delivering a primary over-

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5/ *See Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*, Sixth Report and Order, MM Docket No. 87-268, FCC 97-115, ¶ 143 (released Apr. 21, 1997) ("We intend to consider in a future rule making whether to create a new class of low power television broadcast stations that would modify the secondary status of these stations and provide them some level of interference protection.").

the-air signal to this area. K64BV, however, retransmits KVOA's signal, ensuring uninterrupted primary service to Casas Adobes and the Catalina Foothills. Indeed, K64BV's 74 dBu contour provides coverage to an overall area of 492,334 persons,[6] a significant population considering that Tucson itself has a population of approximately 405,390 people.[7]

In other situations, translators and LPTV stations provide primary television service to areas outside of the main station's authorized coverage area but which would not receive television signals absent the translator or LPTV station. Cordillera's Nampa, Idaho television station, KIVI, uses translators for exactly this purpose. Cordillera operates a translator on Channel 68 (call letters KSAW-LP) in Twin Falls, Idaho which has only two licensed full power commercial television stations. KIVI, an ABC affiliate, and KTVB, licensed to Boise and an NBC affiliate, each owns a translator in Twin Falls, which provide the only ABC and NBC network service, respectively, to Twin Falls and surrounding communities. These translators, accordingly, provide crucial service to this area of Idaho.

Under the Commission's proposals, K64BV and KSAW-LP would be permitted to continue operations on their respective channels provided they caused no interference to new primary services. In a situation where interference does occur, the stations would have to either cease operation or relocate to another channel. The Commission is proposing procedures for the relocation of translator and LPTV stations displaced by new services operating on Channels 60-69, but such procedures will not be sufficient in all cases to permit continued translator or LPTV service. It is very unlikely, for instance, that KVOA could

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[6] *See* Engineering Statement at 2.

[7] 1996 Rand McNally Atlas (using statistics from the 1990 Census).

operate its translator from another television channel. K64BV's operations were commenced only after a long and complicated engineering analysis from which KVOA concluded that Channel 64 would provide the only feasible means of serving the Casas Adobes and Catalina Foothills areas. It is possible that KIVI could operate the Twin Falls translator on an alternate channel; however, given the transition to DTV and the Commission's plan to have a "core" DTV spectrum of only 44 channels, KIVI would have a lesser number of options for relocating its Twin Falls operation. In addition, under the Commission's proposals, even if KVOA and KIVI could easily operate these two translators from other channels, there is no protection from further displacement as new services commence operations.

The Commission cannot, and must not, ignore these considerations in deciding the reallocation of Channels 60 to 69. Reallocation of these channels must allow for protection of existing LPTV and TV translator service. Cordillera urges the Commission to adopt rules that would ensure that existing LPTV and TV translator stations operating on Channels 60 to 69 be permitted to continue operation free from interference caused by new services. Such an allocation plan would permit use of this spectrum by public safety, other broadcast and land mobile services and ensure that viewers who have been receiving primary over-the-air television signals from translators and LPTV stations for decades continue to receive such service.

III. Conclusion.

Cordillera encourages the Commission to reevaluate its proposals to require LPTV and translator stations currently operating on channels in the 746-806 MHz band to protect new services from interference. As demonstrated by Cordillera's experience and as the

Commission has recognized, TV translators and LPTV stations are essential in providing primary over-the-air television service to viewers in the western and mountainous regions of the United States. Given this critical role, the public interest clearly will not be served if these stations are forced to cease or relocate their operations because of interference to new services in the band. Instead, the Commission should require all new services operating on Channels 60 to 69 to protect existing LPTV and TV translator operations from interference. In this manner, the Commission would still be able to achieve more efficient spectrum allocation but also would ensure continued over-the-air television service to viewers in rural and western mountainous states.

Respectfully submitted,

CORDILLERA COMMUNICATIONS, INC.

By: _____
Kevin F. Reed
Elizabeth A. McGeary

Its Attorneys

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September 15, 1997

EXHIBIT A

Engineering Statement of Cohen, Dippell & Everist, P.C.

ENGINEERING STATEMENT
ON BEHALF OF
CORDILLERA COMMUNICATIONS, INC.
CONCERNING
ET DOCKET 97-157

SEPTEMBER 1997

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

That his qualifications are a matter of record in the Federal Communications Commission;

That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this 15th day of September, 1997.

Notary Public

My Commission Expires: 3/28/98

This engineering statement has been prepared on behalf of Cordillera Communications, Inc. ("Cordillera") and provides its comments regarding the nature of proposed rule making entitled, "In the Matter of Television Channels 60-69, the 746-806 MHz Band". The NPRM sets forth the use of the frequency spectrum 746 to 806 MHz. Currently these frequencies are primarily used for TV full-service stations and TV translator stations.

Cordillera has filed its comments in its Petition for Reconsideration in MM Docket 87-268[1] concerning service replication. Cordillera also provided its further assessment in a supplemental filing[2] as a result of the Federal Communications Commission's release of OET Bulletin 69.

Though subsidiaries, Cordillera is the licensee of television station KVOA(TV), Tucson, Arizona. Television station KVOA(TV)'s transmitting site is located on Mt. Bigelow. This site is approximately a distance of 27 km from the center of Tucson. The terrain around Tucson ranges from rugged to relatively uniform. It is in these physically rugged areas that the current KVOA(TV) NTSC signal suffers significant degradation due to loss of signal and/or multiple signals created by terrain and other reflection objects.

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[1] "Engineering Statement in Support of Petition for Reconsideration, MM Docket 87-268 on Behalf of Cordillera Communications, Inc., June 1997".

[2] "Engineering Statement on Behalf of Cordillera Communications, Inc. Concerning Supplement to Petition for Reconsideration, MM Docket No. 87-268, August 1997".

Specifically, KVOA(TV) has identified a geographic area (Casas Adobes--Catalina Foothills) where its signal cannot be received from its main transmitter facility. This area is in a rapidly expanding and vitally important area of Tucson. Over 20 years ago, KVOA(TV) was authorized a translator (K64BV) to serve this area.[3] Further, Cordillera has compared its knowledge of its service areas predicted using the methodology outlined in OET Bulletin 69.

A study of KVOA-TV's existing NTSC service area has been performed by using the National Telecommunications and Information Administration Institute for Telecommunications Sciences ("ITS") computer using the Communication System Performance Model--Point to Point Irregular Terrain HDTV Model ("HDTV model").[4]

A map (Figure 1) has been created showing the areas in which service is predicted using the HDTV model. Also, the predicted Grade B contour is shown determined by traditional FCC methods. As can be seen, virtually all areas in and around Tucson are predicted to receive service from KVOA(TV). However, based upon experience, no full service TV station from Mt. Bigelow serves this area reliably with an off-the-air signal. The normally projected 74 dBu contour has been calculated using traditional FCC methodology. That contour has been superimposed on Figure 1. Figure 1-1 has been enlarged to provide greater detail. The population within the 74 dBu contour has been determined. Translator K64BV's 74 dBu contour serves

[3]All stations from Mt. Bigelow have translators that serve this area.

[4]The HDTV model uses the Longley-Rice propagation methodology and evaluates in grid cell size 0.75-1.5 km with 3-second terrain data intervals between every 90 meters to 100 meters at one degree intervals.

492,334 persons. The station's technical staff reports that the majority of the service to this area is provided by translator K64BV. Therefore, it is crucial that provisions be made for KVOA(TV) to retain translator service to this area.

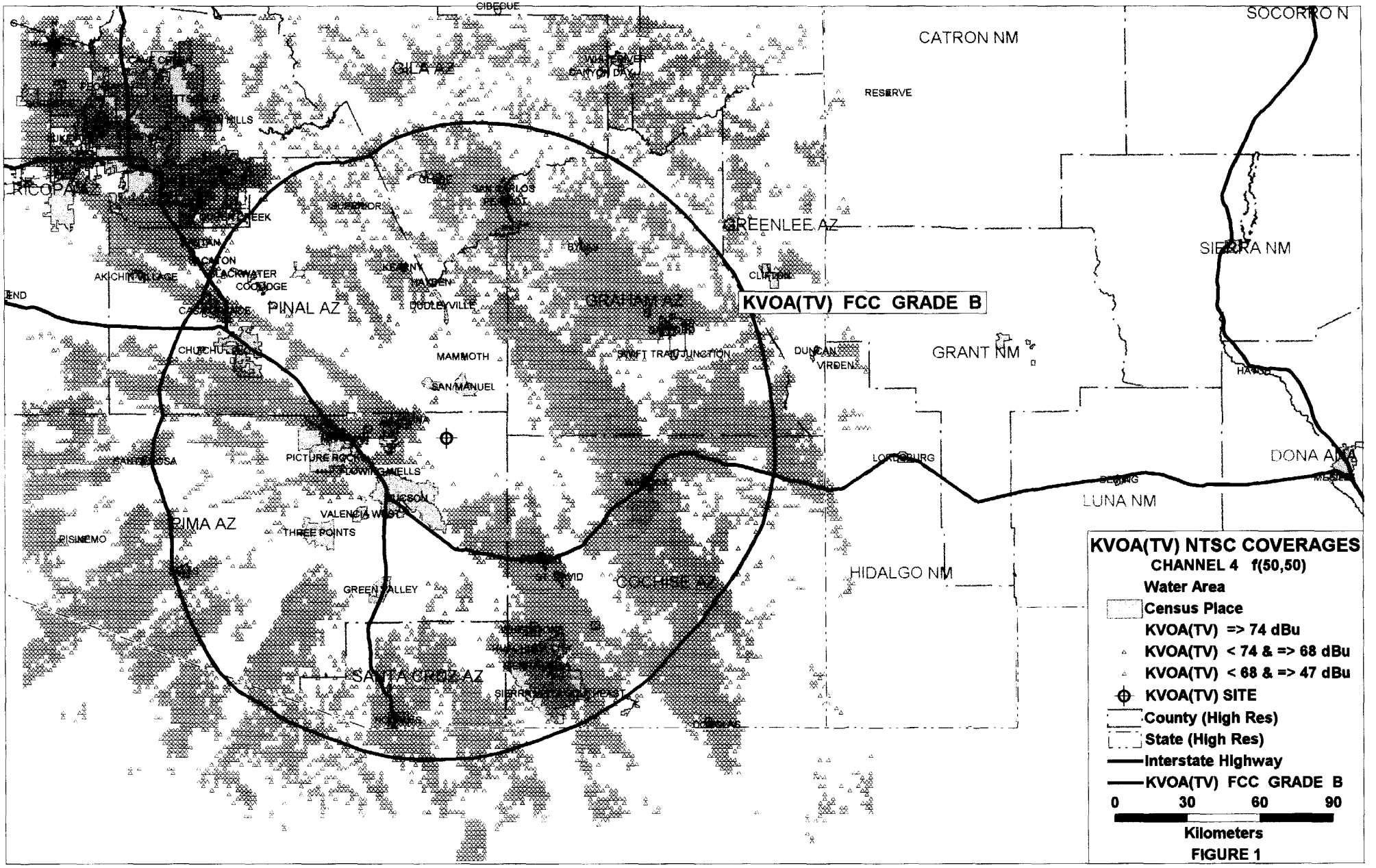
KVOA(TV) FCC GRADE B
CATRON NM
GREENLEE AZ
SIERRA NM
GRANT NM
HIDALGO NM
LUNA NM
DONA ANA
GILA AZ
PINAL AZ
GRAHAM AZ
PIMA AZ
COCHISE AZ
SANTA CRUZ AZ
KVOA(TV) NTSC COVERAGES
CHANNEL 4 f(50,50)
Water Area
Census Place
KVOA(TV) => 74 dBu
KVOA(TV) < 74 & => 68 dBu
KVOA(TV) < 68 & => 47 dBu
KVOA(TV) SITE
County (High Res)
State (High Res)
Interstate Highway
KVOA(TV) FCC GRADE B
0 30 60 90
Kilometers

FIGURE 1

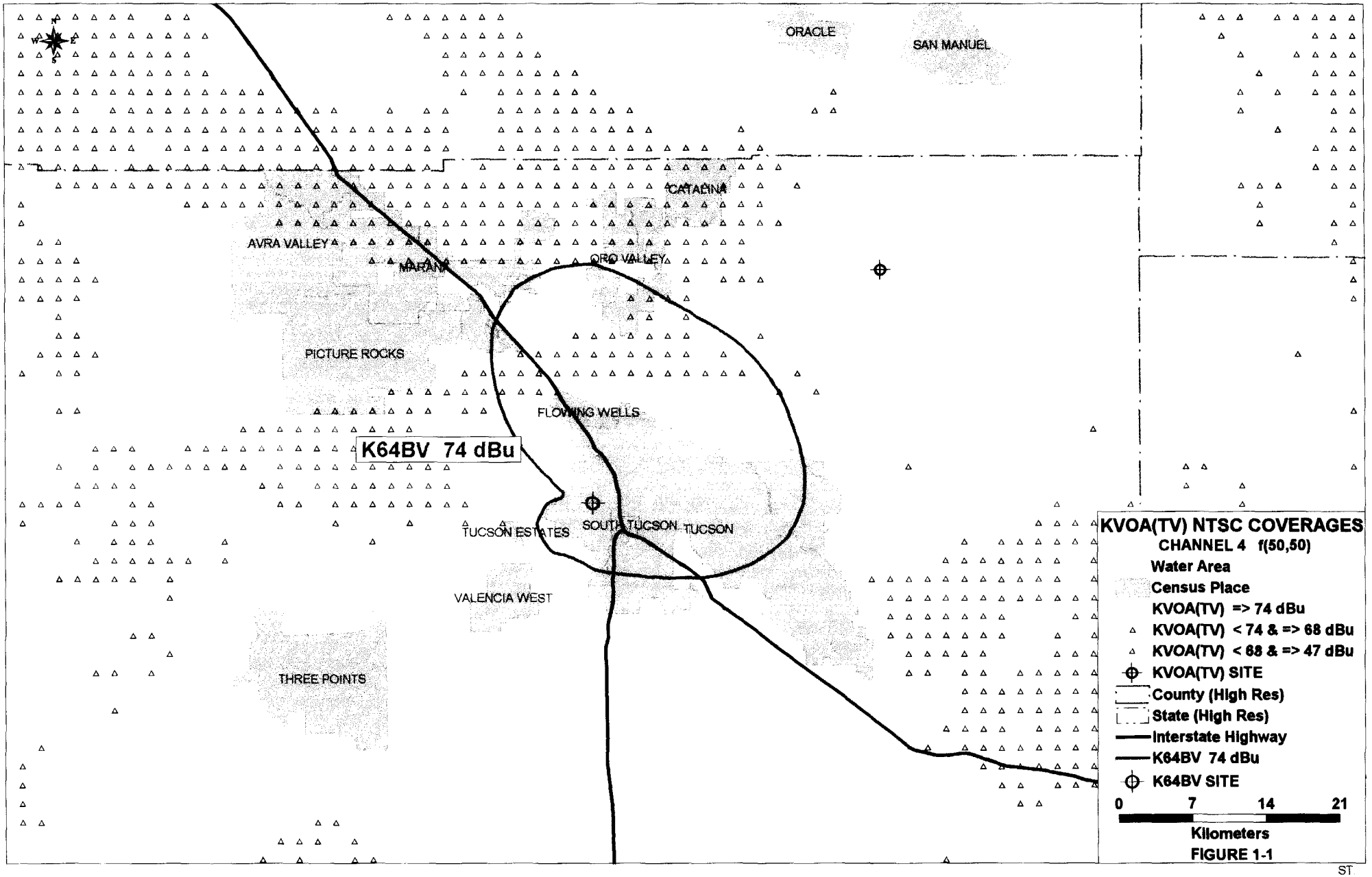
ORACLE
SAN MANUEL
CATALINA
AVRA VALLEY
MARANA
ORO VALLEY
PICTURE ROCKS
FLOWING WELLS
K64BV 74 dBu
TUCSON ESTATES
SOUTH TUCSON
TUCSON
VALENCIA WEST
THREE POINTS
KVOA(TV) NTSC COVERAGES
CHANNEL 4 f(50,50)
Water Area
Census Place
KVOA(TV) => 74 dBu
KVOA(TV) < 74 & => 68 dBu
KVOA(TV) < 68 & => 47 dBu
KVOA(TV) SITE
County (High Res)
State (High Res)
Interstate Highway
K64BV 74 dBu
K64BV SITE
0 7 14 21
Kilometers

FIGURE 1-1

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